

ABSTRACT OF THE DISCLOSURE

This invention is to decrease the sensor pitch,
prevent saturation by external light, accurately
determine skimming, simplify skimming determination,
5 and prevent any difference in influence of the transfer
efficiency between the ON and OFF states. For this
purpose, a distance measuring apparatus includes a
light projection section for projecting light to an
object, a sensor array for receiving reflected light
10 from the object, a first transfer section for
transferring charges from the sensor array, and a
ring-shaped second charge transfer section for
integrating the charges from the first transfer
section, wherein the first charge transfer section
15 transfers charges in a light projection ON state and
charges in a light projection OFF state at a timing,
the transfer frequency of the second charge transfer
section is twice that of the first charge transfer
section, and the timing of the first charge transfer
20 section has a phase different from that of the second
charge transfer section.